INTERNATIONAL SEARCH REPORT

International application No.
PCT/US03/37894

A.	CLA	ASSIFICATION OF SUBJECT MATTER		101/0303/3/6	
IPO	C(7)	: B01D 39/00, 39/06, 53/02, 53/44, 53/52, 53	2164 52172	- POSD 1/02 - 2/02	
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B.	FIE	LDS SEARCHED		assitication and IPC	
Minir	mum do	ocumentation searched (classification system followers			
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Docu	mentati	ion searched other than minimum documentation to t	he extent ti	hat such documents are included	in the fields searched
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Electr	ronic de	ata hase consulted duel-a shallow at			
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<u>C.</u>	DOC	UMENTS CONSIDERED TO BE RELEVANT			
Categ	ory *	Citation of document, with indication, where	appropriat	e of the relevant passages	T D I
X	<	US 6,004,522 A (ENGLAND) 21 December 1999	(21 12 10c	00) see entire de	Relevant to claim No.
		1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	(21.12.15)	55), see entire document.	1-2, 6-13, 17, 22, 26-
Y	7				33
		· ·			3-5, 14-16, 18-21, 23-
					25
•		***]
Y		US 5,942,323 A (ENGLAND) 24 August 1999 (24	4.08.1999),	see entire document.	1-32
v					1-32
	X US 3,957,059 A (RAINER et al) 18 May 1976 (18.05.1976			see entire document.	1-2, 7, 13
Υ					1-2, 7, 13
•	ł				3-6, 14-16, 18-21, 23-
Y	· i	TIC 2 226 222 A (LINCOLD)			27, 30-31, 33
•	- 1	US 3,226,332 A (LINCOLN et al) 28 December 19	965 (28.12.	.1965), see entire document.	1-6, 9-16, 18-27, 31
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F	urther o	documents are listed in the continuation of Box C.			
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	the acti	ual completion of the international search	Date of n	nailing of the international searc	h report
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0 Marc Name an	the action	(30.03.2004) ing address of the ISA/US Stop PCT, Attn: ISA/US nissioner for Patents	Authorize	ed officer	h report